

Ratings and Applications

Airflow Range	10~152,000 m³/h (6~89,412 CFM)
Static Pressure Range	0~700 Pa (0~2.81 in.WG.)
Drive Types	Direct / VFD
Mounting Types	Rooftop
Applications	1. General ventilation Ducted air supply and exhaust 2. Filtered air supply and exhaust 3. Explosion-proof air supply and exhaust 4. Smoke removal



Wheel Technology

1. Air Performance Design

- Optimized design of CFD flow field simulation, repeatedly validated.
- Impeller cutting the air flow asymptotically, air flow direction is stable and high in consistence.
- 3D curved blade design: Guide air to flow smoothly and reduce turbulent current.

2. Structure Performance Design

- Computer aided design of CAE for optimizing structure performance.
- The connection technology of hub and blade is highly reliable.
- Blade end vibration effectively reduced by aided design, prevent blade distortion or breaking after long time running.

3. Advanced Process

- The 3D curved blades are formed by mold pressing to ensure precision.
- Special tooling is adopted for hub to ensure precision.
- Special tooling is adopted for the installation of blade to ensure performance.

4. High Balancing Level

- Balance quality grade up to G2.5.
- Keep running safely and steadily for a long time.
- Extend service life of the fan.

5. Diverse Selection

- 16 kinds of specifications, the maximum impeller diameter is 1800mm.
- Impeller material: carbon steel, stainless steel, alloy aluminum, FRP coated.

General Features

1. Performance Characteristics: Smooth airflow and saving energy

- Patented propeller-type axial wheel: Excellent aerodynamic characteristics and sound characteristic.
- Fan internal with well-organized airflow and the pressure loss is small.
- The clearance between the impeller and tube wall is limited. To be reduced the energy loss caused by the secondary flow and more efficiency.
- High efficient area width without overloading.

2. Appearance Design: Strong wind resistance, Novel and practical

- Low streamline wind band: reduces wind load.
- Pitched wind band baffle: drains snow rapidly by gravity.
- Suitable for strong winds.
- Modernize buildings with enhanced taste.

3. High Reliable Design: Safe and long life

- FEA aided design, distributed evenly of stress for making operation reliable.
- Performance loss caused by working point change.
- Multi-reinforced ribs: greatly increase rigidity and reduce weight.

4. Complete Functions

- Rooftop supply & exhaust.
- Smoke removal duty, positive pressure air supply.
- Explosion-proof supply & exhaust.
- Two-speed ventilation.

5. Full Range of Accessories

- Wind band support stands: To prevent it from being blown away and cause accident during maintenance.
- Wind anchor point (optional) shall be applied to strong wind area.
- Insect screen is for supply fan and bird screen is for exhaust fan.
- Safety guard: Eliminate security risk completely.

6. Advantages of direct drive: efficient, maintenance-free

- Higher transmission efficiency.
- No wearing parts, low maintenance.
- Easier and more effective of maintenance.
- Sealed self-lubricating bearing for motor, increasing service life.
- Motor located the airflow: active cooling.

Technical Information

1. Quality Standards

The fan has designed according to AMCA design procedure, The products are produced within very control procedure following ISO 9001, ISO14001 and ISO 45001.

2. Fan Type

The fan shall be the axial fan which adopts propeller-type axial wheel. The drive type shall be direct-drive.

3. Wheel

Impeller shall be propeller-type axial impeller with the blade of carbon steel (CS) (static applied epoxy powder coating surface treatment) [optional: aluminum blade (AL)/ stainless steel blade/ FRP blade] material.

The impeller shall be statically and dynamically balanced to Level G2.5 as per AMCA204 standard. The fan shall keep stable airflow and low noise at maximum speed. The fan shall effectively avoid performance degradation caused by slide of operating point.

4. Wind Band

The wind band shall be constructed of heavy gauge galvanized steel with a rigid internal support structure. The wind band profile shall be of the streamline type; the structure shall be of the multi reinforced rib type to protect the fan from wind overload; and the external surface shall be pitched to quickly drain rain and snow by gravity.

5. Motor

The motor shall be carefully matched to the fan load. It shall be (IP55,IP56, ...etc) rated with Class F,H Insulation according to project specification . The motor bearing shall be of ball type and lubrication- free. Out of the air stream shall the motor and drive mechanism be located to avoid grease or dirt accumulation.